

*Solanum kieseritzkii* C. A. M. family Solanaceae is an endemic plant growing in the shady damp woods of the lower mountain zone of the Lenkoran-Astara region of the Azerbaidzhan SSR [1, 2]. Its chemical composition has not hitherto been studied. Our paper gives the results of the isolation of glycoalkaloids and saponins from the epigeal parts of this plant.

We extracted the plant material, collected in the budding phase, with methanol. The extract was concentrated and defatted with benzene-ether (4 : 1).

The glycoalkaloids were precipitated with ammonia. The precipitate was filtered off and dried in vacuum at 40-50°C. The combined glycoalkaloids were extracted with methanol and purified on a column of silica gel, elution being carried out with a mixture of methanol and ammonia (3 : 1). The yield of glycoalkaloids was 0.41% (on the weight of the raw material).

By the chromatography of the combined glycoalkaloids on a column of silica gel [in the ethyl acetate-pyridine-water (20 : 5 : 2) system] we isolated five substances in the individual state: I with mp 275-278°C (yield 0.084%),  $R_f$  0.16; II with mp 300-302°C (yield 0.169%),  $R_f$  0.44; III with mp 269-271°C (yield 0.062%),  $R_f$  0.19; IV with mp 287-291°C (yield 0.042%),  $R_f$  0.58; and V with mp 285-286°C (yield 0.0074%),  $R_f$  0.22.

The melting points and IR spectra of compounds I, II, and III coincided with those of authentic samples of solasonine, solamarginine, and tomatine, respectively. The last two substances have not yet been identified. After acid hydrolysis, both IV and V gave solasodine with mp 200-201°C as the aglycone.

In addition, we have established that in the epigeal part of the plant studied there is about 0.36% (of the weight of the raw material) of ethanol-soluble saponins. The acid hydrolysis of the combined saponins gave 0.203% of aglycones.

Chromatography on a plate [with silica gel as the adsorbent, chloroform-ethyl acetate-benzene (65 : 35 : 5) as the solvent, and a 20% solution of  $SbCl_3$  in chloroform as the revealing agent] showed that the aglycones consisted of four substances with  $R_f$  0.45, 0.66, 0.68, and 0.69.

The IR spectra were recorded in paraffin oil on a UR-20 spectrometer by S. V. Serkerov.

## LITERATURE CITED

1. Flora of the USSR [in Russian], Vol. XXII, 1955.
2. Flora of the Azerbaidzhan SSR [in Russian], Vol. XII, 1957.

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